

WHAT IS CLAIMED IS:

1. A semiconductor integrated circuit comprising:

a pad to which an input signal is externally input;
an input stage circuit connected to said pad; and
a buffer circuit having an input terminal connected
to said pad and an output terminal connected to
charge or discharge a parasitic capacitance
between said pad and a semiconductor substrate.

2. The semiconductor integrated circuit defined in Claim 1,
further comprising an island region containing impurities of a
second conductivity type formed on the upper surface of said
semiconductor substrate, and a pad formed on said island
region via an oxide film; wherein said semiconductor substrate
contains impurities of a first conductivity type; and wherein
said output terminal of said buffer circuit is connected to
said island region.

3. The semiconductor integrated circuit defined in Claim 2,
wherein said island region is surrounded with an isolation
region containing impurities of a first conductivity type.

4. The semiconductor integrated circuit defined in Claim 2,
wherein said first conductivity type is a P type and said
second conductivity type is an N type.

5. The semiconductor integrated circuit defined in Claim 1,
wherein said output terminal of said buffer circuit is

connected with said island region by way of a metal conductor.

5 6. The semiconductor integrated circuit defined in Claim 1, wherein the input impedance of said input stage circuit is set to a high value.

7. The semiconductor integrated circuit defined in Claim 6, wherein said input stage circuit comprises an amplifier.

10 8. The semiconductor integrated circuit defined in Claim 6, wherein said input stage circuit comprises a field effect transistor integrated on said semiconductor substrate, said field effect transistor having a gate connected to said pad.

9. The semiconductor integrated circuit defined in Claim 8, wherein said field effect transistor has a drain connected to a power source, and a source connected to the ground via a constant current source, for producing an output signal.

20 10. A semiconductor integrated circuit comprising:

a pad to which an input signal is externally input;
a source follower circuit including a transistor
having a gate connected to said pad and a source
for producing an output signal;

whereby said source follower circuit discharges and
discharges a parasitic capacitance created between
said pad and a semiconductor substrate.

11. The semiconductor integrated circuit defined in Claim 10, further comprising an island region on the upper surface of said semiconductor substrate containing impurities of a second conductivity type, and a pad formed on said island region via an oxide film; and wherein said semiconductor substrate contains impurities of a first conductivity type; and wherein said output terminal of said source follower circuit is connected to said island region.

12. The semiconductor integrated circuit defined in Claim 11, wherein said island region is surrounded with an isolation region containing impurities of a first conductivity type.

13. The semiconductor integrated circuit defined in Claim 11, wherein said first conductivity type is a P type and said second conductivity type is an N type.

14. The semiconductor integrated circuit defined in Claim 10, wherein said output terminal of said buffer circuit is connected said island region by way of a metal conductor.

15. The semiconductor integrated circuit defined in Claim 10, wherein the input impedance of said input stage circuit is set to a high value.

16. The semiconductor integrated circuit defined in Claim 15, wherein said input stage circuit comprises an amplifier.

17. The semiconductor integrated circuit defined in Claim 15,

wherein said input stage circuit comprises a field effect transistor integrated on said semiconductor substrate, said field effect transistor having a gate connected to said pad

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18. The semiconductor integrated circuit defined in Claim 17, wherein said field effect transistor has a drain connected to a power source, and a source connected to the ground via a constant current source, for producing an output signal.

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